



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,863	01/24/2001	Hirotake Nozaki	108414	8835

25944 7590 06/04/2004

OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

MISLEH, JUSTIN P

ART UNIT PAPER NUMBER

2612

DATE MAILED: 06/04/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

✓

Office Action Summary

Application No.

09/767,863

Applicant(s)

NOZAKI, HIROTAKE

Examiner

Justin P Misleh

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 - 18 is/are allowed.
- 6) ☒ Claim(s) 1 - 8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The disclosure is objected to because of the following informalities: typographical errors.
On page 37, lines 18 and 19 state “the eye approach detection sensor or a viewfinder sensor 15”; however, the eye approach detection sensor is 15.

On page 40, line 25 states “a filed angle” when it should state “a field angle”.

Appropriate correction is required.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 7c, 7d, and 8 (all of figure 6) and figure 14 in whole. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2612

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1, 2, and 5 – 8** are rejected under 35 U.S.C. 102(b) as being anticipated by

Kodama.

6. For **Claim 1**, Kodama discloses, as shown in figures 9 – 14B and as stated in columns 10 (lines 40 - 67), 11, 12, and 13 (lines 1 – 47), a camera (see figure 9) that records an image taken using image-capturing elements in a recording medium (see explanation below) comprising:

a focal point detection device (11; see figure 9 and column 11, lines 49 – 51) that detects a focal point adjustment state of a photographic lens in each focal point detection region of a plurality of focal point detection regions (105L2, 105L1, 105C, 105R1, and 105R2) set inside a photographic field (103; see column 13, lines 3 – 9);

an image trimming section (101) that trims part of an imaged picture to create an image for recording in the recording medium (see figures 13A – 14B and column 12, lines 54 – 67, and column 13, lines 1 and 2);

a region changing section (visual axis detection system 18/19 and CPU 12 according to the flowcharts in figures 11 and 12) that changes the focal point detection regions (105L2, 105L1, 105C, 105R1, and 105R2) according to a trimming range (104) of the imaged picture (see explanation below); and

a focal point adjustment device (CPU 12 according to the flowchart of figure 10) that carries out focal point adjustment of the photographic lens based on focal point detection results for the focal point detection regions that have been changed (see column 11, lines 56 – 63).

The preamble requires “image-capturing elements in a recording medium”. Since the preamble is extremely broad and is not further limited in the body of the claim, The Examiner has interpreted “image-capturing elements” as any element(s) that is required for capturing an image and “recording medium” as any medium that is capable of storing an image taken (captured). Thus, Kodama discloses the photographic optical system (1) as the “image-capturing elements” and film/magnetic recording circuit (102) as the “recording medium”.

In a wide-angle state, the imaged picture corresponds to figure 13A or rather a minimum pseudo focal distance (electronic zoom), as stated in columns 10 (lines 56 – 66) and 12 (lines 57 – 60). In a telephoto-angle state, the image picture corresponds to figures 13C or rather a maximum pseudo focal distance (electronic zoom) as stated in columns 10 (lines 56 – 66) and 12 (lines 61 – 65). The focal point detection regions (105L2, 105L1, 105C, 105R1, and 105R2) arranged in the photographic field, as shown in figures 14A and 14B. Furthermore, as shown in figure 11, the user’s visual axis is detected, associated with one of the focal point detection regions, and compared to the trimming range (104) of the imaged picture. Finally, as shown in figure 12, if the focal point detection region that corresponds to the user’s visual axis falls outside the trimming range (104), an alarm is displayed and if the focal point detection region fall that corresponds to the user’s visual axis falls within the trimming range (104), focusing is performed according to the corresponding region.

7. For **Claim 8**, Kodama discloses, as shown in figures 9 – 14B and as stated in columns 10 (lines 40 - 67), 11, 12, and 13 (lines 1 – 47), a camera (see figure 9) comprising:

a focal point detection device (11; see figure 9 and column 11, lines 49 – 51) that detects a focal point adjustment state of a photographic lens in each focal point detection region of a

Art Unit: 2612

plurality of focal point detection regions (105L2, 105L1, 105C, 105R1, and 105R2) set inside a photographic field (103; see column 13, lines 3 – 9);

a photographic field changing section (101) that shades a range of part of the photographic field so that the remainder of the photographic field is recorded to silver halide film (see figures 13A – 15 and column 10, lines 60 – 66, column 12, lines 54 – 67, and column 13, lines 1, 2, and 16 – 29);

a region changing section (visual axis detection system 18/19 and CPU 12 according to the flowcharts in figures 11 and 12) that changes the focal point detection regions (105L2, 105L1, 105C, 105R1, and 105R2) according to shaded range (104; see explanation below); and

a focal point adjustment device (CPU 12 according to the flowchart of figure 10) that carries out focal point adjustment of the photographic lens based on focal point detection results for the focal point detection regions that have been changed (see column 11, lines 56 – 63).

In a wide-angle state, the imaged picture corresponds to figure 13A or rather a minimum pseudo focal distance (electronic zoom), as stated in columns 10 (lines 56 – 66) and 12 (lines 57 – 60). In a telephoto-angle state, the image picture corresponds to figures 13C or rather a maximum pseudo focal distance (electronic zoom) as stated in columns 10 (lines 56 – 66) and 12 (lines 61 – 65). The focal point detection regions (105L2, 105L1, 105C, 105R1, and 105R2) arranged in the photographic field, as shown in figures 14A and 14B. Furthermore, as shown in figure 11, the user's visual axis is detected, associated with one of the focal point detection regions, and compared to the trimming range (104) of the imaged picture. Finally, as shown in figure 12, if the focal point detection region that corresponds to the user's visual axis falls outside the trimming range (104), an alarm is displayed and if the focal point detection region

Art Unit: 2612

fall that corresponds to the user's visual axis falls within the trimming range (104), focusing is performed according to the corresponding region.

8. As for **Claim 2**, Kodama discloses, the camera according to Claim 1, wherein: said region changing section (18/19 and 12) selects focal point detection regions (105L2, 105L1, 105C, 105R1, and 105R2) according to the trimming range of the imaged picture (see flowchart of figures 11 and 12 and column 11, lines 66 and 67, and column 12, lines 1 – 53).

9. As for **Claim 5**, Kodama discloses, as stated in columns 10 (lines 40 – 50) and 13 (lines 30 – 47), the camera according to Claim 1, wherein: said image trimming section (101) trims and enlarges central portions of the imaged picture, and creates an electronically zoomed image.

10. As for **Claim 6**, Kodama discloses, as shown in figure 13B and as stated in columns 12 (lines 61 – 65), the camera according to Claim 1, wherein: said image trimming section (101) removes upper and lower parts of the imaged picture and trims central broad portions to create a pseudo wide image or a pseudo panorama image (33). Figure 13B is an intermediate step between figure 13A (wide angle) and figure 13C (telephoto); hence figure 13B is a pseudo wide image.

11. As for **Claim 7**, a manual region selection focal point adjustment mode corresponds to the user's visual axis detection system (18/19 of figure 9) because the user's visual axis (i.e. gaze direction) selects an arbitrary focal point detection region among the plurality of focal point detection regions (105L2, 105L1, 105C, 105R1, and 105R2) so as to carry out focal point adjustment (S513 of figure 10). Kodama discloses, as shown in figure 11, a warning (S607) is issued if a focal point detection region that cannot be selected, because it is outside the trimming range, has been selected.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kodama in view of Iyama (JP 06-094976). Iyama is a Japanese Published Patent Application. The Examiner has provided an English language abstract and an English language computer translation of the application. However, the Examiner will primarily rely on the abstract and the figures in the following rejection.

14. As for **Claim 3**, Kodama discloses the camera according to Claim 1, wherein a region changing section (visual axis detection system 18/19 and CPU 12 according to the flowcharts in figures 11 and 12) changes the focal point detection regions (105L2, 105L1, 105C, 105R1, and 105R2) according to a trimming range (104) of the imaged picture (see explanation below); however, Kodama does not disclose wherein said region changing section changes position of focal point detection regions according to the trimming range of the imaged picture.

On the other hand, Iyama also discloses a camera incorporating a region changing section that changes the focal point detection regions according to a trimming range. More, specifically Iyama disclose focal point detection regions (20a – 20e) that lay outside of and within a trimming range (broken line), as shown in figures 11 and 23. Moreover, Iyama states that the focal point detection regions (20a and 20e) that lay outside of the central part (20c) can be changed to the focal point detection regions (20b and 20d) that lay inside the central part (20c) in

Art Unit: 2612

the case of panoramic photography or trimming photography. As stated in paragraph 0005 of the English language translation, at the time the invention was made, one with ordinary skill in the art would have been motivated to change the position of the focal point detection regions, as taught by Iyama, in the region changing section, of Kodama, as a means to ensure that ranging/focusing of the main photographic subjects is carried out correctly. Therefore, at the time invention was made, it would have been obvious to one with ordinary skill in the art to have change the position of the focal point detection regions, as taught by Iyama, in the region changing section, of Kodama

15. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kodama in view of Tanii et al.

16. As for **Claim 4**, Kodama discloses the camera according to Claim 1, wherein a region changing section (visual axis detection system 18/19 and CPU 12 according to the flowcharts in figures 11 and 12) changes the focal point detection regions (105L2, 105L1, 105C, 105R1, and 105R2) according to a trimming range (104) of the imaged picture (see explanation below); however, Kodama does not disclose wherein said region changing section changes the size of focal point detection regions according to the trimming range of the imaged picture.

On the other hand, Tanii et al. also disclose a camera (figure 4) incorporating a region changing section (33 and 30) that changes the focal point detection regions (FA, FA1, and FA2) according to a trimming range. More specifically, Tanii et al. states that it is “an object of the present invention ... to provide a camera capable of enlarging the focus condition detecting area automatically when a mode of operation is selected where a large focus condition detecting area is required. The camera of Tanii et al. operates according to, among other things, a panoramic

Art Unit: 2612

mode and/or pseudo zoom mode. As shown in figures 10 and as stated in columns 8 (lines 65 – 67) and 9 (lines 1 – 57), the sizes of the focal point detection regions (FA, FA1, and FA2) are changed according to the operating mode. As stated in column 1 (lines 28 – 34), at the time the invention was made, one with ordinary skill in the art would have been motivated to change the sizes of the focal point detection regions, as taught by Tanii et al., in the region changing section, of Kodama, as a means to ensure that ranging/focusing of the main photographic subjects when they are not centrally located within the photographic field. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to change the sizes of the focal point detection regions, as taught by Tanii et al., in the region changing section, of Kodama.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to the Applicant's disclosure.

- Both US 6,192,198 B1 and JP 05-019158 A disclose the concept of adjusting the focal point detection regions according to zooming, trimming, and/or panoramic modes.
- Both US 5,264,889 and US 5,307,111 disclose the concept of a user manually selecting the focal point detection region from a plurality of focal point detection regions.

Allowable Subject Matter

18. **Claims 9 – 18** are allowed. The following is a statement of reasons for the indication of allowable subject matter:

For **Claims 9 and 10**, the prior art teaches in the very least automatic focusing and manual focusing both of which include setting a focus detection region(s) in a field of view. In automatic focusing, the focus detection region(s) in the field of view are varied by position and/or size to obtain an optimal focus detection region. Thus, the optimal focus detection region(s) is brought into focus and the entire field of view is displayed accordingly. In manual focusing, the focus detection region(s) in the field of view are selected or varied by position and/or size manually by a user operating a switch of some sort. The user selects the focus detection region(s) of their choice. Thus, the selected focus detection region(s) is brought into focus and the entire field of view is displayed accordingly. In both the above-described automatic focusing and manual focusing, the field of view is superimposed with the focus detection region(s) and shown in combination in a viewfinder. The field of view is obtained from an image-taking lens and reflected by half-mirrors, mirrors, lenses, and prisms to an eye of the user and the focus detection region(s) is provided by an internal liquid crystal display. An example of this concept can be found in US 6,670,992 B2.

In the prior art, variations exist wherein no viewfinder is provided and rather only a display or monitor is provided and the automatic focusing and/or manual focusing, as described above, can be performed by a user viewing the display or monitor. Examples of this concept can be found in US 6,633,336 B2, US 4,873,576, and US 6,359,650 B1.

Furthermore, the prior art also discloses a camera comprised of a viewfinder and a display or monitor and when a user is looking into the viewfinder, the display or monitor is turned off, thereby preventing any camera control via the display or monitor. However, the prior

Art Unit: 2612

art discloses power saving advantages too. Examples of this concept can be found in US 5,699,115, US 5,581,323, and US 6,091,450.

Lastly, the prior art discloses an electronic camera with both a manual focusing operation and an automatic focusing operation wherein an automatic focusing operation is automatically inhibited upon detection of a manual focusing operation performed by a user. An example of this concept can be found in US 6,144,804.


Therefore, in regards to the claim language, the prior art does not teach or fairly suggest, in the very least, a camera comprising an optical viewfinder through which a subject is looked, a monitor that displays a position of each of the focal point detection regions (of a plurality of focal point detection regions) superimposed on a subject image taken using image-capturing elements, a region selecting member that manually selects an arbitrary focal point detection region from within the plurality of focal point detection regions, a sensing section that senses a non-used state of said monitor; and a prohibiting section that prohibits manual selection of focal point detection regions by said region selection member when the non-used state of said monitor is detected.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 703.305.8090. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 5:30 PM and on alternating Fridays from 7:30 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy R Garber can be reached on 703.305.4929. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
May 29, 2004


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600